United Nations A/55/157–E/2000/101

General Assembly
Economic and Social Council

Distr.: General
24 July 2000

Original: English

General Assembly
Fifty-fifth session
Items 88 and 102 of the provisional agenda*

Questions relating to information

Globalization and interdependence

Economic and Social Council
Substantive session of 2000
5 July-1 August 2000
Agenda item 13**
Economic and environmental questions

Letter dated 17 July 2000 from the Permanent Representative of Japan to the United Nations addressed to the Secretary-General

I have the honour to transmit to you herewith the report of the G-7 Finance Ministers to the Heads of State and Government entitled "Impact of the information technology revolution on the economy and finance" (see annex), which was adopted by the G-7 Finance Ministers at their meeting held at Fukuoka, Japan, on 8 July 2000.

I should be grateful if you would have the present letter and its annex distributed as a document of the fifty-fifth session of the General Assembly, under items 88 and 102 of the provisional agenda, and of the substantive session of 2000 of the Economic and Social Council, under item 13 of the agenda.

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* A/55/150.
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Annex to the letter dated 17 July 2000 from the Permanent Representative of Japan to the United Nations addressed to the Secretary-General

Impact of the information technology revolution on the economy and finance

Report of the G7 Finance Ministers to the Heads of State and Government

Fukuoka, 8 July 2000

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Impact of the information technology revolution on the economy and finance

(Report of the G7 Finance Ministers to the Heads of State and Government)

1. We, Finance Ministers of the G7 countries, note that the advance of the Information Technology (IT) revolution holds the promise of becoming a major force in the global economy in improving productivity, raising maximum potential output, and promoting higher living standards. In order to ensure that the benefits of IT are promptly reaped by our societies and do not lead to increasing inequalities, countries must put in place appropriate macroeconomic and structural policies.

2. In this report, we focus on the macroeconomic impact of the IT revolution, its policy implications, and issues relating to financial transactions and tax systems.

A. Macroeconomic Impact and Its Policy Implications

Acceleration of Productivity and Increase in Demand

3. We recognize that IT has the potential to increase growth in our economies although the impact of IT is still at an early stage and it is difficult to anticipate its exact timing, nature and strength. The increase in production potential due to IT will not be limited to IT-related industries, but will extend to the overall economy. First of all, the IT revolution can increase the rate of growth of the capital stock by stimulating active IT-related investment. This kind of investment leads to increasingly sophisticated IT technology being built into capital and, accordingly, raises the quality of capital as well. More importantly, by increasing the speed with which information is disseminated and shared inside and outside corporations, the IT revolution can drastically alter the combination of capital and labor, bring about greater efficiency in conducting business, facilitate corporate restructuring, induce a synergistic effect, and thus lead to productivity increases that cannot be attributed to either capital or labor (total factor productivity). For instance, it can reduce the need for intermediary business, make inventory management more efficient, and enable businesses to procure inputs or conduct outsourcing in the business-to-business (B-to-B) market that is networked globally.

4. In addition to the supply side, the IT revolution will have effects on the demand side through increased IT-related investment, expansion of demand for IT-related services, and the development of new consumer-oriented services,

including business-to-consumer (B-to-C) electronic commerce and electronic financial transactions. Atwo-way flow of information between businesses and consumers made possible through the Internet can generate new types of demand and new business opportunities. IT-related investment and services would involve "network externalities" in which benefits increase dramatically as the number of users increases, and "increasing returns to scale" in which costs are reduced and profits increase as the market grows in size. These are likely to contribute to the further expansion of demand.

5. As a result of this accelerated growth potential on the supply side in parallel with expansion on the demand side, IT can contribute to stronger growth. like many other technological innovations, IT may bring job losses in certain areas, but create jobs in IT-related businesses. Overall, we can expect a positive impact on employment due to stronger economic growth.

6. Given that the IT revolution has just begun, over the course of time it can have wide-ranging and in-depth effects on our economies, in the same way that important general-purpose technologies had in the past. Already, significant effects on potential growth can be seen in some countries, but there are disparities in the pace at which countries are benefiting from the IT revolution. Indeed, there is nothing automatic about the productivity gains and higher standard of living that come with major innovations such as IT. Deriving the benefits of IT will require sound policies and a robust, but also flexible, open economy as an essential backdrop.

Macroeconomic Policy

7. We agree that the most important role to be played by government, in order to help our economies maximize the potential returns from IT, is to develop an environment that is conducive to private-sector creativity and entrepreneurship. We emphasize that, from this perspective, sound macroeconomic policy continues to be, or is becoming even more, essential. A growth- and stability-oriented macroeconomic environment will stimulate investment and help businesses and consumers to confidently plan for the future and exploit the advantages presented by IT.

8. The IT revolution can make the environment, in which macroeconomic policy is conducted, more complex and uncertain. In the initial stages of the IT revolution, estimating productivity gains and their impact on potential growth becomes more complex. Similarly, traditional yardsticks for gauging financial market performance may appear less applicable, and this has made it more

difficult to appropriately assess risk and return on investment decisions. These increased uncertainties can complicate the choices policy-makers face in calibrating macroeconomic policy management and promoting sustained non-inflationary growth. We must remain mindful of these realities in framing our policies.

9. In addition, in an increasingly globalized economy in which capital can be easily and quickly transferred across borders, differences in the degree to which countries adapt to the IT revolution may lead to large capital flows, and widen the divergence in economic performance between countries even further. Such divergences and the ensuing flows may further create challenges for the promotion of stable and balanced macroeconomic conditions. Achieving greater equality in the pace with which countries benefit from the IT revolution will contribute to promoting a balanced pattern of growth among our economies.

10. In the longer term, the IT revolution may have implications for monetary aggregates and their role in the conduct of monetary policy and for the stability of financial system more generally as electronic financial transactions and digital money become major elements of our national economies.

Structural Policy

11. We agree on the importance of structural policy to develop an environment for vigorous private-sector activity for maximizing the results of IT, and to ensure that people can fairly and widely share benefits from IT opportunities. From this perspective, we emphasize the necessity of:

a) Continuing to remove regulatory impediments in order to promote competition and new entry in key IT-related sectors.

b) Increasing the adaptability of labor markets. Retraining and learning opportunities can help workers successfully transition into new, better-paying jobs.

c) Putting in place appropriate competition and other policies to facilitate dissemination of new technologies and to ensure competition in the new environment.

d) Maintaining an open international trade system.

We note the importance of an efficient and high- quality allocation of our public

resources, with the view to contribute to needed structural reforms.

12. It is also crucial that financial markets be designed in a strong, secure and flexible way to channel resources to their most productive uses. A financial system that can properly match the demand for and supply of capital, and diversify and reallocate risks, is essential in order to meet the funding needs for new businesses and investment opportunities. For startup firms that lead in technological innovation and that seek to take the greatest possible advantage of their technology, a highly transparent and deep capital market will be of particular significance from the point of view of risk-taking and corporate governance.

B. Implications for the Financial Sector

13. We observe that the financial sector is undergoing many changes, including the emergence of financial transactions on the Internet. It is important that government provides an appropriate environment for maximizing the efficiency and convenience of this innovation.

Impacts of the IT Revolution on Financial Services

14. As the financial sector deals with information and data that are easily digitalized, this is one of the industries with the most advanced use of, as well as under the heaviest influence of, IT. Specifically, the IT revolution has enabled the following changes in the financial sector:

a) In electronic financial transactions, utilization of the Internet, with its characteristics of speedy, low-cost, and broad communication, can permit a drastic reduction in transaction costs and improvements in customer convenience.

b) By eliminating the limitations of time and distance, electronic financial transactions can make cross-border transactions easier and, thus, make it possible to provide services to customers on a global scale.

c) Electronic financial transactions have enabled new financial services such as the "virtual financial site" that includes services crossing the traditional borders between financial services as well as "aggregation" that allows consumers to obtain consolidated information about their financial accounts in one place.

d) In addition, under the IT revolution, globalization, and resulting competitive environment, we are seeing innovative developments in the unbundling of risks, the evolution of derivative transactions, and the entry of non-financial companies into the financial sector.

15. On the other hand, we note that, since electronic financial transactions, especially those of B-to-C, are being conducted on open networks centered on the Internet, many challenges will arise in terms of transaction security, consumer protection, and privacy.

Financial Regulation and Supervision

16. We recognize that, while financial regulation and supervision should be technology neutral, they should respond to the above-mentioned characteristics of electronic financial transactions. The objective should be to preserve market integrity without inhibiting the initiative of the private sector.

17. It is important that consumers have confidence in the security of electronic financial transactions. We should encourage the development of systems to combat computer hacking, and the use of encryption and electronic signatures to ensure the security of data. In addition, we need to ensure the development of reliable settlement systems on the Internet; the security of existing settlement systems, such as credit cards, will remain important.

18. For consumer protection in electronic financial transactions, it is important to ensure there is no erosion in the level of protection currently enjoyed by customers of financial services. Rules in areas such as disclosure to investors, explanation and information provision at the time of solicitation and purchase, the provision of documents to customers, and dispute resolution, should also apply to business conducted on the Internet, while methods of applications of those rules may need to be adapted. Also, as the transfer of personal data has become extremely easy, we need to promote strengthening of policies for privacy protection.

19. We should promote international cooperation in establishing as well as implementing principles for financial regulation and supervision, paying due attention to the current rules in each country. From this viewpoint, we welcome the work being done by the Basel Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO), and the International Association of Insurance Supervisors (IAIS) in establishing

principles or guidance for the regulation and supervision of electronic financial transactions. We encourage further work by these institutions in line with the following focus:

a) Consistent regulation and supervision irrespective of the means of transactions, including electronic financial transactions.

b) Transparent regulation and supervision in a more complicated business environment, and flexibility to continuously review our supervisory activities to reflect new developments.

c) Fostering the potential of electronic financial transactions within prudent risk parameters without unduly constraining its innovation.

d) Security of transaction and customer protection pertinent to the characteristics of electronic financial transactions.

e) Enhanced cooperation among supervisory authorities in response to the increase in cross-border transactions.

20. We welcome the mapping exercise by the Financial Stability Forum (FSF) on electronic financial transactions, including their potential impact on financial safety, as a basis for possible future work.

21. Management and board members of financial institutions must understand the risks and challenges arising from the development of electronic financial transactions. Financial regulators and supervisors must also ensure that they have the necessary knowledge and skills to deal with the new development. From this viewpoint, we encourage our national authorities to promote methods and techniques for training supervisory staff in IT-related knowledge and skills, and ensure that adequate supervisory resources are devoted to this issue. We should also consider providing technical assistance to help developing countries in their efforts to train regulators and supervisors.

Financial Business Patents

22. With the revolutionary changes in technologies through computers and the Internet, patents have been granted to an increasing number of business method inventions, including in the area of financial services. We recognize that, with the development of IT in finance, our policies toward financial business method patents could have implications for innovation and competition in financial

markets. This issue needs to be addressed in the context of international cooperation with the view to enhancing common understanding of treatment of business method patents.

23. In this respect, we welcome the joint work already underway among our patent authorities on business method patents, and look forward to further development. We have asked our financial experts to meet with our patent authorities and to discuss whether and how the issues of common interest are being dealt with at the international level and how international cooperation in this field is progressing.

C. Taxation and Customs Procedures

Electronic Commerce and Taxation

24. We recognize that the IT revolution, especially the development of electronic commerce, has important implications for tax systems and their administration, in particular, through the changes discussed below.

a) Digitalization: IT provides innovative ways of offering "digital" services such as on-line supply of music and images, and for providing information services. Moreover, while broader use of electronic means for recording information improves the efficiency of business activities, it may make it easier to falsify data.

b) Disintermediation: Electronic commerce often eliminates the need for intermediation and thus reduces the opportunities of monitoring and compliance for taxation purposes.

c) Further internationalization: Cross-border transactions between parties in different tax jurisdictions can increase substantially through the Internet which is open and borderless.

25. We note the importance of the key elements for addressing issues on electronic commerce and taxation which were identified in the report of the Committee on Fiscal Affairs (CFA) of the OECD, entitled "Electronic Commerce: Taxation Framework Conditions" and welcomed by OECD Ministers in October 1998 in Ottawa.

a) It is important to provide a fiscal climate within which electronic commerce

can flourish, weighed against the obligation to operate a fair and predictable tax system that provides the revenue required to meet the legitimate expectations of citizens for publicly-provided services. In addition, efforts should also be made to improve taxpayer service by making utmost use of information technology.

b) Conventional taxation principles, such as neutrality, equity, and simplicity, should underlie the taxation of electronic commerce. At this stage, existing tax rules can implement these principles for electronic commerce. While there may be cases where some adaptation to the existing rules is required, such adaptation should not discriminate among forms of commerce, be they electronic or traditional.

26. We welcome the OECD's ongoing work on relevant taxation issues, focusing on the following points:

a) How to ensure efficient and effective tax administration: Electronic commerce can be conducted in more invisible and anonymous ways. It is vital, therefore, to secure access for tax administrators to transaction information to the same extent as for traditional forms of commerce.

b) How to apply the existing international rules for direct taxation to electronic commerce: As electronic commerce further facilitates cross-border economic activities, there should be clarification of how the concepts in the OECD Model Tax Convention, such as "permanent establishment" and classification of income, apply to electronic commerce.

c) How to apply consumption taxes to cross-border, on-line transactions: Consumption taxes should be applied where consumption takes place. In order to explore the practical application of this principle, issues, such as the definition of the place of consumption and effective collection mechanisms, are being addressed.

27. We recognize that the CFA of the OECD is taking the lead in the examination of these tax issues related to electronic commerce with contributions from business and non-OECD economies. We support this work and encourage the CFA to make further progress.

Customs Procedures

28. Regarding customs procedures, we endorse our customs experts' report on their efforts to standardize and simplify electronic customs declarations. We urge them to set a timetable for implementation, in which other countries and organizations are invited to participate; take steps to develop "single window" systems to allow traders to report data required by customs and other agencies once when they release goods; and so adopt the principles for the use of IT set out in the revised Kyoto Customs Convention.